

IN THE CLAIMS

A detailed listing of all claims is provided below, with a status identifier being further provided for each claim. Claim 29 is newly submitted. Claims 1-4, 14-17, 22, and 29 are pending. Favorable consideration is respectively requested.

1. (Original) A method for processing an extensible mark up language (XML) document comprising:

parsing the XML document into schema elements and data elements;
converting the schema elements into data type definition (DTD) objects;
validating the data elements using the DTD objects; and
if valid, constructing an in-memory tree representation of the XML document using the data elements.

2. (Original) The method of claim 1, wherein the converting comprises:

calling a method in a first application program interface (API); and
as a result of calling the first method, calling one or more methods in a second API to construct the DTD objects.

3. (Original) The method of claim 1, wherein the converting comprises referencing one or more tables that define the schema elements and associated functions for processing the schema elements.

4. (Original) A computer-readable medium having computer-executable instruction, which when executed by a computer, performs the method of claim 1.

Claims 5 – 13: Canceled

14. (Original) An architecture for processing an extensible mark up language (XML) document comprising:

a parser to parse the XML document into elements including schema elements and data elements;

a schema node factory, called by the parser, to handle calls to construct a node in an in-memory tree representation of the XML document for the elements; and

a schema builder, called by the schema node factory, to construct data type definition (DTD) objects used in validating the data elements.

15. (Original) The architecture of claim 14, wherein the schema builder utilizes one or more tables to process the elements, the tables containing information defining a schema for the XML data.

16. (Original) A computer implemented with the architecture of claim 14.

17. (Original) A client-server system, comprising:

a server;

a client connectable to the server to exchange extensible mark up language (XML) documents;

at least one of the client and the server implementing the architecture of claim 14.

Claims 18 – 21: Canceled

22. (Original) A system for processing an extensible mark up language (XML) document comprising:

means for parsing the XML document into schema elements and data elements;

means for converting the schema elements into data type definition (DTD) objects;

means for validating the data elements using the DTD objects; and

if valid, means for constructing an in-memory tree representation of the XML document using the data elements.

Claims 23 – 28: Canceled

29. (New) The architecture of claim 14, further comprising a validation node factory to evaluate whether the data elements comply with constraints set forth in the DTD objects.
